

IN THE CLAIMS

Please amend claims 1, 4 and 5 and cancel claims 3 and 7-9. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (Currently Amended): A method for identifying a compound which modulates the kinase activity of a polypeptide selected from the group consisting of:

(a) an isolated polypeptide which is encoded by the nucleotide sequence contained in the plasmid deposited with ATCC as Accession Number PTA-1530;

(b) an isolated cardiac-related ankyrin-repeat protein kinase polypeptide comprising an amino acid sequence encoded by a nucleic acid molecule which hybridizes to a complement of a nucleic acid molecule consisting of SEQ ID NO:1 or 3 in 6X SSC at 45°C, followed by one or more washes in 0.2X SSC, 0.1% SDS at 65°C;

(c) an isolated cardiac-related ankyrin-repeat protein kinase polypeptide which is encoded by a nucleic acid molecule comprising a nucleotide sequence which is at least 90% identical to the nucleotide sequence of SEQ ID NO:1 or 3[[,]];

(d) an isolated cardiac-related ankyrin-repeat protein kinase polypeptide comprising an amino acid sequence which is at least 90% identical to the amino acid sequence of SEQ ID NO:2; and

~~(e) an isolated polypeptide consisting of at least 25 consecutive amino acid residues of the amino acid sequence of SEQ ID NO:2; and~~

~~—————(f) an isolated polypeptide comprising amino acid residues 463-716 of SEQ ID NO:2[[,]];~~

the method[[,]] comprising:

(i) contacting the polypeptide or a cell expressing the polypeptide with a test compound; and

(ii) determining the effect of the test compound on the activity of the polypeptide;

to thereby identify a compound which modulates the kinase activity of the polypeptide.

2. (Previously Presented): The method of claim 1, wherein the polypeptide comprises the amino acid sequence of SEQ ID NO:2.

3. (Canceled)

4. (Currently Amended): The method of claim 1[[3]], wherein the effect of the test compound on the kinase activity of the polypeptide is determined by monitoring autophosphorylation of the polypeptide.

5. (Currently Amended): The method of claim 1[[3]], wherein the effect of the test compound on the kinase activity of the polypeptide is determined by monitoring phosphorylation of a heterologous substrate.

6. (Original): The method of claim 5, wherein the heterologous substrate is selected from the group consisting of H1 histone, myelin basic protein, ATF-2 and Phas-1.

7-9. (Canceled)

10. (Original): The method of claim 1, wherein the cell expressing the polypeptide is a heart cell.

11. (Original): The method of claim 1, wherein the compound inhibits the activity of the polypeptide.

12. (Original): The method of claim 1, wherein the compound stimulates the activity of the polypeptide.